ABSTRACT

A wireless ad hoc pico network is formed by eyewear and other devices such as a computer, a bracelet and a telephone having similar transceivers mounted on them. Master slave relationships are configurable. Other devices, such as a radio, a CD player, a hand held global positioning satellite system and a heart rate monitor, having similar transceivers, can also be connected with the transceiver of the eyewear. The transceivers operate on globally available, unlicensed radio band, 2.45 gigahertz (GHz) and conforms to the Bluetooth standard. The power consumption of Bluetooth enabled devices is less than three percent of the power consumption of a mobile phone. The eyewear includes a frame and connected to the frame are two temples. Temples are connected to frame via hinges. Temples have a male portion of a connector incorporated in them. Female portion of the connector is made integral with the hinges. When the male portion is inserted in the female portion the temple is attached to the frame. The temples can be removed by pulling the connector apart, and a temple with different apparatus within it can be inserted in place of the removed temples. The temple may have co-molded within its body, an apparatus such as an audio device, a camera, a speaker, and a microphone, and a display device such as liquid crystal or an alarm. In another embodiment, eyewear constitutes a distance alarm to monitor the movement of, for example, a child. A device in form of, for example, a bracelet is worn by the child. The transceivers in the eyewear and the bracelet form a small-range wireless network, i.e., piconet, wherein the eyewear and the bracelet communicate using signals conforming to the Bluetooth technology. The transceiver in the eyewear is configured to generate an alarm when the bracelet exceeds a predetermined distance from eyewear.

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